### REMARKS

## Timing of this response

The Office Action ("the Action") was mailed on February 7, 2001. Because the PTO Form 948 did not accompany the Action, and was only faxed to applicants' representative on April 3, 2001, the Examiner, in a telephone interview with applicants' representative on July 9, 2001, extended the period for responding to the Action by two months, making the due date for responding to the Action July 7, 2001.

By virtue of a Petition for Extension of Time (three months) filed concurrently herewith, and the requisite extension-of-time fees, the response due date to the Action is extended October 9, 2001. Accordingly, this response is timely.

## Status of Claims

Claims 1-28 are pending, and Claims 1, 3, 4, 9-11, 19 and 21-27 are under examination and stand rejected. Claims 1-28 have been cancelled without prejudice or disclaimer, and new Claims 29-38 have been added. Support for the new claims are found throughout the specification, including the original claims as filed. In particular, support for Claim 35 can be found at page 8, lines 16-29 of the Specification. No issues of new matter are believed to be raised. Favorable reconsideration of the application is respectfully requested in view of the amendments above and the remarks that follow.

#### **Drawings Informalities**

The issues raised in Form PTO 948 accompanying the Action are all formality-related. Accordingly, applicants respectfully defer filing of Formal Drawings until allowance of the claims is indicated.

## Claim Rejections Under 35 U.S.C. §112 ¶1

The Examiner rejected former Claim 25 for alleged lack of enablement, asserting that the Specification does not provide enablement with regard to nucleic acid sequences having at least 90% sequence identity to SEQ ID NO:1. Claim 25 has been cancelled, and the recitation of "90% sequence identity" is not recited in newly added Claims 29-38. Accordingly, this rejection has been overcome by the claim amendments.

The Examiner also rejected former Claims 1, 3, 4, 9-11, 19, and 21-27, asserting that the Specification does not provide adequate written description for a genus of nucleic acid molecules "consisting essentially of" SEQ ID NO:1, or "a portion of" a c-Src gene, or nucleic acid molecules "having at least 90% identity" with SEQ ID NO:1. Claims 1, 3, 4, 9-11 and 21-27 have been canceled, and new Claims 29-38 do not recite the above-quoted phrases. Specifically, new Claim 28 recites an isolated polynucleotide encoding a mutant c-Src protein, codon 531 of which polynucleotide is a stop codon, and SEQ ID NO:1 is a specific example of such a polynucleotide. Claim 35 recites an oligonucleotide probe/primer that can be used to specifically identify the mutant of the c-Src gene of the present invention. Adequate written description for Claim 35 can be found, for example, at pages 8 and 29. All other new claims are dependent claims. Therefore, applicants respectfully submit that the alleged lack-of-written-description rejection has been overcome.

#### Claim Rejections Under 35 U.S.C. §112 ¶2

The Examiner further rejected former Claims 1, 3, 4, 9-11, 19, and 21-27 for alleged indefiniteness. Specifically, the Examiner asserted that the recitations of "consisting essentially of," "truncated," "SRC 531," "fragments thereof," and "tyrosine kinase-like activity" are vague and indefinite. Applicants respectfully submit that these terms are either well understood by a person of ordinary skills in the art (e.g. "consisting essentially of," "truncated," "fragments" and "tyrosine kinase-like activity") or specifically defined in the Specification (e.g. "SRC 531," at

page 9, lines 10-17), these rejections are improper. However, because former claims 1, 3, 4, 9-11 and 21-27 have been cancelled, and new claims 29-39 do not recite any of the above controversial phrases, applicants respectfully submit that this rejection has been rendered moot.

#### Claim Rejections Under 35 U.S.C. §102

The Examiner rejected Claims 3, 4, 9-11 and 24 under 35 U.S.C. §102(b) over Cartwright *et al.*, asserting that this reference disclosed a truncated c-Src gene. The Examiner further rejected Claims 1, 9-11 and 21-27 under 35 U.S.C. §102(e) over U.S. Patent No. 5,336,615 ("the '615 patent"). Applicants respectfully traverse.

Applicants have re-written the pending claims as new claims 29-38. Applicants wish to emphasize that the claim amendments are made solely in order to advance prosecution without acquiescing to the propriety of the Examiner's assertions. New Claims 29-38 specifically recite that the claimed polynucleotides are c-Src gene sequences having a stop codon at the 531 codon position. Because this mutation is novel, applicants respectfully submit that neither Cartwright et al. nor the '615 patent anticipates the new claims, which are in condition for allowance.

The rejection of the claims over Cartwright et al. or the '615 patent is improper because of the Examiner's misinterpretation of the term "SRC 531 mutant." The Specification makes it abundantly clear that this term means a mutant c-Src gene having a stop codon at codon position 531 (See e.g. page 9, description of Figure 1). This specific mutant is not disclosed in Cartwright *et al.*, nor in the '615 patent.

The rejection of the claims over Cartwright et al. is improper because nowhere in Cartwright et al. was any portion of SEQ ID NO:1 disclosed, nor was it clear that the gene in Cartwright et al. has the sequence of SEQ ID NO:1.

Furthermore, the rejection of Claim 1 over the '615 patent is improper. The Examiner asserted that the '615 patent "discloses a recombinant nucleic acid or its complement that is at least 90% identical to the nucleotide sequence of SEQ ID NO:1." However, even if this

assertion is true, the '615 patent does not anticipate Claim 1 as Claim 1 does not recite "90% homology."

## **CONCLUSION**

It is respectfully submitted that new Claims 29-38 are in condition for allowance and such action is hereby solicited. If the Examiner believes there is any issue that could be resolved by telephone or personal interview, the Examiner is requested to contact the undersigned attorney at the telephone listed below.

#### **AUTHORIZATION**

No additional fees are believed to be necessary, however, the Commissioner is hereby authorized to charge any additional fees which may be required for this Response, or credit any overpayment to Deposit Account No. 50-0436.

In the event that an Extension of Time is required, or which may be required in addition to that requested in a petition for an Extension of Time, the Commissioner is requested to grant a petition for that Extension of Time which is required to make this response timely and is hereby authorized to charge any fee for such an Extension of Time or credit any overpayment for an Extension of Time to Deposit Account No.50-0436.

Respectfully submitted,

PEPPER & HAMILTON LLP

Gilberto M. Villacorta, Ph.D. Registration No. 34,038

Kening(Li, Ph.D.

Registration No. 44,872

600 Fourteenth Street, NW Washington, DC 20005-2004 Telephone: (202) 220-1200 Facsimile: (202) 220-1665

Date: October 9, 2001

## **APPENDIX**

## **VERSION WITH MARKINGS TO SHOW CHANGES MADE**

# **IN THE CLAIMS:**

Claims 1-28 have been cancelled without prejudice or disclaimer.

New Claims 29-38 have been added.